

Controlling the development of the oil reservoir penetrated by a system of injecting and producing wells

Konyukhov V., Konyukhov I., Chekalin A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Copyright 2016. The mathematical model and software for calculation of the interconnected heat and mass transfer in the non-uniform oil reservoir and in the arbitrary located injecting and producing wells equipped with electrical submersible pumping systems are developed. Possibility of the optimal control by the operating regime of each well, its submersible equipment and oil reservoir is demonstrated by concrete examples.

Keywords

Electric submersible pump, Multiphase flow, Oil reservoir, Well system